PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 13048:14	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US00/29689	International filing date *(day/month/year)* 25 OCTOBER 2000	Priority date *(day/month/year)* 27 OCTOBER 1999
International Patent Classification (IPC) or national classification and IPC IPC(7): H04L 12/24; G06F 15/173and US Cl.: 709/224		
Applicant MICRO WEB SERVERS		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets.

   ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the report
   - II ☐ Priority
   - III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
11 MAY 2001	12 DECEMBER 2001
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer Peggy Harrod MARK RINEHART
Facsimile No. (703) 305-3230	Telephone No. (703) 305-3800

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/US00/29689

I. Basis of the report

1. With regard to the **elements** of the international application:*

[X] the international application as originally filed

[X] the description:
pages 1-25 , as originally filed
pages NONE , filed with the demand
pages NONE , filed with the letter of _____

[X] the claims:
pages 26-34 , as originally filed
pages NONE , as amended (together with any statement) under Article 19
pages NONE , filed with the demand
pages NONE , filed with the letter of _____

[X] the drawings:
pages 1-12 , as originally filed
pages NONE , filed with the demand
pages NONE , filed with the letter of _____

[X] the sequence listing part of the description:
pages NONE , as originally filed
pages NONE , filed with the demand
pages NONE , filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.
These elements were available or furnished to this Authority in the following language _____ which is:

[ ] the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

[ ] the language of publication of the international application (under Rule 48.3(b)).

[ ] the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

[ ] contained in the international application in printed form.

[ ] filed together with the international application in computer readable form.

[ ] furnished subsequently to this Authority in written form.

[ ] furnished subsequently to this Authority in computer readable form.

[ ] The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

[ ] The statement that the information recorded in computer readable form is identical to the writen sequence listing has been furnished.

4. [X] The amendments have resulted in the cancellation of:

[X] the description, pages NONE

[X] the claims, Nos. NONE

[X] the drawings, sheets/~~fig~~ NONE

5. [ ] This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

** Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).*

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.
PCT/US00/29689

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. statement

Novelty (N)	Claims	(Please See supplemental sheet)	YES
	Claims	(Please See supplemental sheet)	NO
Inventive Step (IS)	Claims	(Please See supplemental sheet)	YES
	Claims	(Please See supplemental sheet)	NO
Industrial Applicability (IA)	Claims	(Please See supplemental sheet)	YES
	Claims	(Please See supplemental sheet)	NO

2. citations and explanations (Rule 70.7)

Claims 3, 4, 12, 18-23, 25-27, 40-42, 45, 46. 54, 60, 61, 71-75, 77-79, and 88-91 meet the criteria set out in PCT Article 33(2), because a single prior art does not teach or fairly suggest internet-based sensoring.

Claims 1, 2, 5-11, 13-17, 24, 28-39, 43, 44, 47-53, 55-59, 62-70, 76, and 80-87 lack novelty under PCT Article 33(2) as being anticipated by Beheshti et al. "Beheshti", U.S. Patent No. 5,955,946.

Regarding claim 1, Beheshti discloses a system for monitoring a space and its contents over a network, comprising:

a microprocessor to provide processing and network connectivity capability [Beheshti, col. 2, line 57 - col. 3, line 40 and col. 5, line 35 - col. 6, line 38];

one or more sensors to detect one or more physical parameters and generate one or more sensor signals representative of the detected physical parameters [Beheshti, col. 6, line 39 - col. 8, line 25];

an analog-to-digital converter for converting one or more of the sensor signals to a digital format and to provide one or more corresponding digital signals to the microprocessor [Beheshti, col. 6, line 39 - col. 7, line 42];

instructions for processing the sensor signals and corresponding digital signals and generating an alarm signal when any of the one or more physical parameters exceeds a corresponding threshold value [Beheshti, col. 2, line 57 - col. 3, line 40 and col. 6, line 39 - col. 8, line 25];

at least one input/output port for communicating with the network[Beheshti, col. 2, line 57 - col. 3, line 40 and col. 5, line 35 - col. 6, line 17];

one or more memory modules for storing system data [Beheshti, col. 6, line 39 - col. 7, line 42];

a network based interface for providing programming instructions to the microprocessor and for receiving monitoring status and alarm information from the system; and a power source to power the system [Beheshti, col. 7, line 29 - col. 8, line

(Continued on Supplemental Sheet.)

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

V. 1. REASONED STATEMENTS:
The report as to Novelty was positive (YES) with respect to claims 3,4,12,18-23,25-27,40-42,45,46,54,60,61,71-75,77-79,88-91.
The report as to Novelty was negative (NO) with respect to claims 1,2,5-11,13-17,24,28-39,43,44,47-53,55-59,62-70,76,80-87.
The report as to Inventive Step was positive (YES) with respect to claims NONE.
The report as to Inventive Step was negative (NO) with respect to claims 1-91.
The report as to Industrial Applicability was positive (YES) with respect to claims 1-91.
The report as to Industrial Applicability was negative (NO) with respect to claims NONE.

V. 2. REASONED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):
69].

Regarding claims 2 and 5-8, Beheshti further discloses the network is a global computer network and comprises an Ethernet connector (RJ-45 to Cat 5 or Cat 3 wiring connector) or a serial connector (RJ-11 connector) to interface with external devices, the power source is the excess voltage provided by an Ethernet cable coupled to the Ethernet connector [Beheshti, col. 2, line 57 - col. 3, line 40 and col. 6, lines 1-67].

Regarding claim 9, Beheshti further discloses wherein the network connectivity capability is via a telephone line [Beheshti, col. 6, lines 1-67].

Regarding claim 10, Beheshti further discloses the Ethernet interface has compliant TCP/IP stacks [Beheshti, col. 2, line 57 - col. 3, line 40 and col. 6, lines 1-67].

Regarding claims 11 and 13, Beheshti further discloses the microprocessor is an embedded Java microprocessor and operates on an embedded Java software platform [Beheshti, col. 6, lines 1-67 and col. 8, lines 6-46].

Regarding claims 14 and 15, Beheshti further discloses the one or more sensors further comprise no more than one of each of a temperature sensor, a relative humidity sensor, and an air flow sensor,wherein the relative humidity sensor further comprises a Figaro Engineering NH-2 humidity sensor, and wherein the air flow sensor further comprises a hot wire anemometer circuit [Beheshti, col. 5, lines 35-67 and col. 10, lines 7-31].

Regarding claims 16 and 17, Beheshti further discloses the one or more physical parameters comprise temperature, relative humidity,and air flow, with indicator lights to indicate one or more system conditions [Beheshti, col. 5, lines 35-67 and col. 10, lines 7-31].

Regarding claim 24, Beheshti further discloses the programming instructions comprise parameter threshold values [Beheshti, col. 5, lines 35-67 and col. 10, lines 7-31].

Regarding claims 28 and 29, Beheshti further discloses a rechargeable backup battery to provide power upon loss of the power source, the power source is a 5 volt DC power source [Beheshti, col. 2, line 57 - col. 3, line 40 and col. 6, lines 1-67].

Regarding claims 30-33, Beheshti further discloses a video imager (CMOS imager) to provide a digital image of the space or its contents, wherein a binary input to activate the video imager to capture a current image of the monitored space and the system is mounted internal to a component rack for monitoring of individual components [Beheshti, col. 7, line 43 - col. 8, line 46].

Regarding claims 34, 35, 38, and 39, Beheshti further discloses
an external sensor, wherein the external sensor provides the binary input upon the occurrence of a preset condition, wherein the external sensor is a magnetic switch for sensing the opening of a door to the space, and wherein the preset condition is the opening of the door and one or more binary outputs connected to one or more relays to control one or more external loads, and instructions for controlling the outputs, wherein controlling comprises turning an external load on or off, and wherein the external load is an air conditioning unit [Beheshti, col. 7, line 29 - col. 8, line 69 and col. 10, lines 7-31].

Regarding claims 36 and 37, Beheshti further discloses instructions for software agents operable to investigate the internal condition of network components, wherein the software agents investigate the internal condition of compatible network components through SNMP, DMI, and SMBIOS interfaces [Beheshti, col. 8, lines 6-59].

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Regarding claims 43, 44, 47-53, 55-59, 62-70, 76, and 80-87, 43, 44, 47-53, 55-59, 62-70, 76, and 80-87 have similar limitations as claims 1, 2, 5-11, 13-17, 24, and 28-39. Therefore, they lack the same novelty as shown above.

Claims 1, 2, 5-11, 13-17, 24, 28-39, 43, 44, 47-53, 55-59, 62-70, 76, and 80-87 lack an inventive step under PCT Article 33(3) as being obvious over Beheshti. See reasons above.

Claims 3, 4, 12, 18-23, 25-27, 40-42, 45, 46, 54, 60, 61, 71-75, 77-79, and 88-91 lack an inventive step under PCT Article 33(3) as being obvious over the prior art as applied in the immediately preceding paragraphs and further in view of Ditmer et al. "Ditmer", WO 99/15950.

Regarding claim 3, Beheshti does not specifically disclose the use of the Internet. However, Ditmer, in the same field of endeavor, discloses an Internet monitoring and alarm management [Ditmer, pages 26-33]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate an internet-based monitoring system, taught by Ditmer, in to the monitoring system, taught by Beheshti, since both deal with monitoring fault within a system. Therefore, the system would be able to monitor in a remote site, thought the internet, making the system global.

Regarding claim 4, Beheshti-Ditmer further discloses the network is an intranet [Beheshti, col. 8, lines 6-59] [Ditmer, pages 26-27].

Regarding claim 12, Beheshti-Ditmer further discloses the microprocessor is a tiny internet interface microprocessor [Beheshti, col. 2, line 57 - col. 3, line 40 and col. 6, lines 1-67] [Ditmer, pages 26-28].

Regarding claim 18, Beheshti-Ditmer further discloses a radio frequency interface operable to communicate wirelessly with the network or with a device external to the network [Beheshti, col. 8, lines 6-59] [Ditmer, pages 39-42].

Regarding claims 19-23, Beheshti-Ditmer further discloses the status report indicates that one or more of the one or more physical parameters has exceeded the corresponding threshold value and instructions for generating and forwarding an email (or electronic page) alarm report to one or more users when any one of the one or more physical parameters exceeds the corresponding threshold value [Beheshti, col. 8, lines 6-59] [Ditmer, pages 32-34 and 39-42].

Regarding claims 25-27, Beheshti-Ditmer further discloses the programming instructions are provided in HTML, the network based interface is an HTML interface, wherein the HTML interface comprises an image display area, a monitored parameter display area, an alarm threshold display area, and a system user information display area, the system user information display area can be configured by a user to display customized information [Beheshti, col. 2, line 57 - col. 3, line 40 and col. 6, lines 1-67] [Ditmer, pages 32-34 and 46-48].

Regarding claims 40 and 42, Beheshti-Ditmer further discloses the instructions for processing can be updated via the network based interface and a 64-bit encoder chip to provide encryption and password protection for the network based interface configurable by a user [Beheshti, col. 8, lines 6-59] [Ditmer, pages 32-34 and 39-42].

Regarding claim 41, Beheshti-Ditmer further discloses a smoke alarm sensor for generating an alarm signal upon detecting an audible smoke alarm [Beheshti, col. 8, lines 6-59] [Ditmer, pages 32-36].

Regarding claims 45, 46, 54, 60, 61, 71-75, 77-79, and 88-91, 45, 46, 54, 60, 61, 71-75, 77-79, and 88-91 have similar limitations as claims 3, 4, 12, 18-23, 25-27, 40-42. Therefore, they lack the same inventive steps as shown above.

The arguments given in the response are not persuasive over the prior art of record [as shown above] because the arguments expand upon the limitations are not recited in the claims. Although the claims are interpreted in the light of the specification, the limitations from the specification are not read into the claims.

Claims 1-91 meet the criteria set out in PCT Article 33(4), because the use of a global monitor system has use in the defense industry.

---------- NEW CITATIONS ----------

US 5,955,946 A (BEHESHTI et al.) 21 SEPTEMBER 1999, see col. 5 - col. 7, line 52 and col. 8, line 6 - col. 9, line 40.

Supplemental Box
(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

WO 99/15950 A (DITMER et al.) 1 APRIL 1999, page 4, lines 3-33 and pages 26-35.